

## ABSTRACT OF THE DISCLOSURE

A plate-recording and printing system is provided with a printing plate recording device for recording an image on a printing plate based upon binary image data formed in an image data processing device, a printing press for carrying out a printing operation by using the printing plate, an image pickup device for picking up an image of a printed object that has been printed and a profile forming device for forming profile data of the printing press from the image data thus picked up. First, a printing operation is carried out under reference conditions by using predetermined ink and sheet of printing paper. An image of a color chart on the printed object is picked up by the image pickup means. The print color of the color chart is determined in the Lab color system based upon the image data. Profile data of the printing press is generated as a function of the print color and the predetermined reference color of the color chart. This profile data is stored in association with kinds of ink and sheets of printing paper used in the printing press. Prior to forming binary image data to be used in the printing plate recording device, the image data processing device specifies printing conditions of the ink and sheets of printing paper to be used in the printing press placed on the following stage, and reads profile data related to these printing conditions. Then, it carries out a color conversion on the image data by using the profile.